

Administration of Public Education: Summary and Analysis of Modern Trends

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[**Abstract**] In this paper the author deals with the recent trend of considering administration in education as an art as well as a science. Ways of perceiving its fundamental processes, roles, and functions continue to evolve and change in contingency with the dynamic forces of change taking place in modern society. This gives a new dimension and perspective from which modern definition is derived as explicated here concerning its necessity and the participants involved.

[**Key words**] administration, decision-making, education, leadership, organization, planning, processes, structure.

We, as educators, are involved in the conceptualization of theories from which hypothesis are formulated and put to the test of practice. We have begun in recent years to concern ourselves with considerations of organization and their social settings. The former lends itself to scientific treatment; analogies with school organizations being compared to those found in factories, hospitals, governments and such. The latter type of analysis, social and behavioral, concerns itself with the sociological processes that give life to the particular institution. Either way, what is ultimately analyzed and in turn gives validity to analysis is the performance of the school itself - "in the match of goals, resources and expertise that enact and deliver educational programmes in a single highly visible and local organization." (Tyler 1988 : 5)

Definition of Educational Administration and its Necessity

In defining educational administration, we can define 'administration' etymologically by attributing to it the characteristics of 'helping', 'caring', and 'serving'. (Knezevich (1984)) This action-oriented function of administration has been consistently recognized as a major influence in the art of administration. However, with very little exception, a scientific outlook towards administration in general, and educational administration in particular, has been lacking until very recent times. Much more recent is the advent of the socio-behavioral analytical framework realizing its inception with the studies done by Waller¹ and such in the 1930's.

These two approaches, scientific on the onehand and holistic on the other, may seem to be very different indeed. However, they are not necessarily exclusive of one another nor in conflict. In fact, the more powerful outlook would call for a "framework which embraces both the formalised and rationalised picture theory and the more fluid, dynamic and indeterminate image of the loose coupling [holistic socio-behavioral] model." (Tyler 1988 : 14)

As the complexity of the educational system in the United States (in particular, but among most developed countries) expanded in depth and scope, so increased the need for those with a variety of skills and functions. Needed more and more were those who could implement policies, recognize and pursue objectives, be effective in the utilization of resources, and perform the function of a catalyst in the operations of educational organizations. As it stood until recently, these roles could be filled by "anyone with a good general education and without specialized study in education or its administration." (Knezevich 1984 : 5) However, since "school administrators are more accurately identified as a subset of the expanding field of educational administration" (Ibid., pg.3), this calls for the selection of administrators having a specialization in the field of education. These administrators should also be relied on for their experience and technical knowledge for the

management of educational institutions.

Amplifying on the definition of educational administration, Knezevich notes that "administration is a support and facilitating mechanism" and emphasizes the influence of society. This influence is on the functions of and expectations for education and on the structure for its concomitant organization. Society expects of its organizations the effective delivery of services. This is also true in the case of education. To this end we have the justification for the emergence of a new comprehensive educational administration. This is especially necessary in the face of, and increase in, the complexity and diversity of the challenges with which educational institutions are faced.

The necessity of administration is identified by its functions and contributions to educational institutions. Some of these include, the implementations of policies and decisions of the state including the clarification and pursuit of objectives, directions and priorities. Internal processes include, but are not limited to, assembling resources, increasing the productivity of all its members, and coordinating human efforts and material use. A supervisory task is the monitoring of progress towards objectives. A further but not insignificant function is projecting an effective, productive, and dynamic image of the institution while reporting to the state and to the people on the execution of responsibilities. This orientation towards management processes as the defining criteria of educational administration is a relatively new one relying on analogy with other types of organization.

Ideally, the above processes and functions of educational administration, might be further divided and standardized as absolute goals to be efficiently and effectively realized. However, today in the face of change whose intensity is only exceeded by its rapidity, "existing administrative structures and leadership demands must be modified as new goals and pressures emerge." (Knezevich 1988 : 5) The systems model views the educational organization as a network of interrelated,

unified subsystems progressing towards common objectives. This approach relies on the administrator as leader to meet the demands of such an organization. As important as the understanding of political, economic, and social dimensions are, this leader (or administrator) should have a sharp grasp of technical, human, and conceptual skills. He or she must also recognize when they should be applied. The implication here being that administration, along with a scientific grounding would be at the same time perceived as an art. Within the successful administrator is embodied the knowledge of the differing models of administration and the good judgment of knowing when to apply, or the limitations of, either the art or the science.

General Systems Theory and Generalizable Processes of Administration

Best suited to the application of good judgment and flexibility is the contingency model. This suggests that "when the environment is stable and predictable, the classical form of bureaucracy is the most appropriate organizational form. However, when there is a higher level of uncertainty, arising from interconnectedness of parts of the environment and its rate of change ('turbulence'), a more effective strategy may be to delegate authority to specialists whose operations can be managed through more participatory and decentralized mechanisms of control and co-ordination." (Tyler 1988 : 68) The contingency model is not in conflict with, nor does it challenge, the classical Weberian general set of principles interpreted here as the general systems theory. In this section, I deal with the 'static' classical form of bureaucracy, characterized perhaps as the traditional monocratic type. In the later section on the social setting of administration, I deal with the more flexible aspects of the contingency model as it pertains to a rapidly changing society.

One of the tenets of general systems theory is that similar certain fundamental principles can be discovered in systems in varying and

different fields. This leads to the assumption by many that diverse administrative activities rely on processes that have a common nature across all fields of domain.

These principles may manifest themselves as 'key questions' (What is to be done? How will the work be divided? How will the work be done? What will the work be done with? When will the work be done? How well should the work be done? How well is the work being done?) (Knezevich 1988 : 11), or 'statements' (To define and set forth the purposes, aims, etc., To lay down the broad plan for structuring the organizational, To recruit and organize the executive staff., To direct and oversee the general progress of activities., To assure that quantity and quality of performance are maintained., To provide for good coordination among rank and file., To motivate and energize all personnel., To evaluate outcome relative to purpose., To foresee and forecast to allow for adjustments to inside or outside influences. (Ibid., pg.10) or, as is more common in recent usage, 'descriptive terms'.

The similarities found between the key questions and the key statements point out that "in the school administrative process there is no reason for departing from Fayol's classification" (Knezevich 1988 : 9) of descriptive terms. Fayol's primary inventory of terms (1916) has been modified and extended but basically include the processes of planning, organizing, commanding, coordinating and controlling. This set of universal processes has only recently, and in a sense belatedly, been recognized as applicable to the field of educational administration as well.

Furthermore, there is a tendency to describe administrative process in a dual classification system owing to the fact that "the words and the statements [used to describe processes] selected may have different levels of abstraction." (Knezevich 1988 : 14) Different levels of abstraction of terms has led to the development of a dual classification system consisting of first-order (higher level) abstractions which are

involved in the discharge of all functions of second-order abstractions. "First-order abstractions have overarching significance in the organization and to the administrator" (Knezevich 1988 : 14) and incorporate planning, decision making, leadership, executing, managing change, and appraising. These are in contrast to, but not in conflict with, the second-order abstractions of goal orienting, organizing, assembling and allocating resources, coordinating, controlling and the performance of ceremonial functions.

Basic Administrative Processes Described by Special Terms

A further definition of administration can be found in the terms used to describe the roles and the required abilities in the fulfillment of them. These roles are not exclusive of each other and include, but are not limited to, direction setter, leader-coordinator, communicator, conflict manager, problems manager, systems manager, instructional manager, personnel manager, resource manager, appraiser, public relator, and ceremonial head. The administrator indeed wears many hats and is essentially assumed to have acquired the skills necessary to fulfill them.

These roles and their competencies are interrelated and overlap; henceforth the ability of the administrator to integrate them to the most effective degree (i.e. the creation of a group with the capabilities to effect these roles) constitutes the "art" of administration. At each and every one of these points of activity, what the administrator brings to the task requires the application the skills and processes that make him or her an effective decision-maker. The decision making process is at the core of administration and although described as an art, goes beyond intuition and is the result of a definite process. In fact, as Morphet *et al.* point out, "If innovative decisions are made efficiently, the processes are probably very similar in all types of formal organization." (Morphet et al. 1982 : 126) Generally speaking, these atypical processes can be summarized as follows:

1. Recognize and define the problem or issue.
2. Analyze the difficulties in the existing situation.
3. Establish criteria for problem resolution.
4. Develop a plan or strategy for action. This involves specifying alternatives, predicting consequences and deliberating and selecting the alternatives for action.
5. Initiate the plan for action which involves programming, communicating, monitoring and appraising.²

The material with which the administrator must work - the people, resources, ideas, value systems and change - adds to, and underscores, the complexity of the practice and gives us the scope of the challenge of educational administration.

The Social Setting of Educational Administration

A final consideration taken in this vein is the environment, or cultural setting, in which educational administration takes place, particularly in the United States. Just as education influences and acts upon events which take place in the culture of which it is a part, so too does the self-same culture affect the administrative styles, standards, and expectations of education. These cultural considerations tend to be 1) educational attainment goals, 2) birthrates for the nations, 3) rural and urban population changes, 4) economics, productivity, and wealth, and 5) home, family, and education. In the sense that educational administration responds to and modifies itself according to the surrounding culture, it is sometimes viewed as an ever-changing and adaptive organism. This can only be the case when the organization has the autonomous function of "[mediating] directly between the social system and its (the organization's) environment." (Tyler 1988 : 32) This is especially true in modern times when drastic change demands adaptability of all functionaries involved in the social setting.

Administrators in the United States are fortunate enough to be in

a country where the educational attainment of the populace is the highest in the world with the rate of illiteracy one of the lowest (less than 1 %) in the world.³ One of the future challenges facing education and educational administration is the dramatic change in population structure of the U.S. with a continuing steep numerical decline of school-agers bottoming out only in 1975. Another drastic change that has greatly influenced the practice of educational administration is the urbanization of the population. The U.S. is now an urban population with over 73.7% of those in the country living in urban areas. This creates "special administrative and other problems for all manner of government and social institutions including education." (Knezevich 1988 : 19)

Some of the forces impacting strongest on the financing of public education are the economics, productivity and wealth of the nation. The economic down-trend that has resulted in several recessions throughout the 70's and 80's and continuing into the early 90's has remained a looming threat to the adequate support for public education. On the other hand, education has continued to prove, and increasingly proves, to be an important determiner in employment capabilities for individuals not just in securing employment but in job promotion and personal job satisfaction. National manpower planning strategies also depend on the education of the work force. Finally, perception of the functions of the family *vis a vis* education has met with rapid and intense change in the last few decades. The downturn in family size continues unabated as the U.S. (along with many other countries around the globe) witnesses the development of the post-nuclear family. Heightened divorce rates, the increase in the number of working mothers, and the sharp rise in the number of one-parent families with children have all contributed to influence American culture and therefore education and educational administration.

The Role of Decision-Maker in Social Organizations

Of major concern in the field of educational administration is that of the specialized roles of the administrator and the competencies demanded of one in such a position within the educational organization. This role is that of the administrator as decision-maker and is dependent upon the organizational structure for its manifestation. Therefore, the organization of institutions is also taken under consideration in this section.

Decision-making processes pervade all aspects of human societal behavior and the activities undertaken therein. The welfare and effectiveness of the educational organization is affected by choices made also within the organization itself. In its own turn, decision-making is impacted upon by the nature of the organization and the processes by which it came to be arranged. The organizing process develops the formal (and informal) linkage of diverse members. It then coordinates the efforts of these individuals as a unified social group. The actors in this goals, in turn, enhance the productive capacity of the institution. Shared goals become the goals of the individual whose conduct is influenced by the expectations of the organization. This generally takes place while the person is acting in the organizations, but not necessarily when she or he is away from it.

The Nature of Bureaucratic Organizations

The organization process leads to the creation of a "formal and systematic means for differentiating functions, distributing decision-making authority, structuring work patterns, coordinating resources, designing machinery to sustain operations and clarifying objectives." (Knezevich 1988 : 23)

The German scholar Max Weber (1864-1920) developed a model for human organization that is now described as a bureaucracy. Weber's original idea for the monocratic, bureaucratic model is at odds with the popular perception of the bureaucracy as an inefficient, rule-

encumbered monolith. Instead, he visualized the bureaucracy as a facility for the realization of rational decision-making in organizations. Some of the characteristics attributed to this model include; a division of labor, a well-defined hierarchy of authority, a system of rules and regulations, a statement covering work to be performed, impersonality in working relationships (what may be termed as professionalism), and a commitment to merit.

The American social scientist, Herbert Simon (1916-)⁴ also addressed the idea of professionalism. He viewed the organization as a mechanism regulating decision-making processes to limit the scope of individual authority. He thought that this could be done through the creation of a structure that enhances rational decision-making. This was to be done by means of formal rules, channeling information flow, and programs for the training of personnel to recognize viable alternative.

The design of any organization outlines a structure based on the principle of the division of labor. There are many facets of this division but some of the most important include departmentalizing (the creation of subdivisions of work), establishing the hierarchy of authority, the span of supervision, and differentiation based on staff-and-line positions. The creation of subdivisions is the activity on which the other activities depend, and hence, is probably the most important in the design of organizations.

Some of the most frequent considerations of this departmentalization in educational administration are products or services (such as instruction, counseling, and so on), location, time organization, clients served, processes (teaching as separate from administration or counseling), functions [more detailed processes including public relations, research, testing, building maintenance, etc.], and expertise in subject matter by the staff.

Authority and Power: Their Source and Scope

The distribution of authority and power of decision-making is subsumed under the establishment of an hierarchy or "chain of command". The size of the organization and the complexity that comes with it determine to a large part the number of decision points created and their distribution throughout the various levels of authority.

Authority as used here, should not be confused or equated with the concept of power. Weber gives us the concept of *authority* as being established through the recognition and acceptance of the conditions it commands by those persons subject to it. This type of authority has as its source either the position it attains in the hierarchy or the possession of special expertise (technical authority) that the person in the position has. On the other hand, *power* is obeyed involuntarily and depends on the control of resources which the individual (subject to this power) desires, or depends on the negative reward of punishment as its source.

In addition to these motivational forces of authority and power is the dynamic of persuasion which procures voluntary compliance. This is done by the cogency of argumentation or the ability of the persuader to inspire faith in his followers. This type of compliance goes beyond that achieved by authority (legitimate position) or power (the consideration of personal wants). In fact, the latest trend seems to be emerging in which two axial principles are discerned. Those being a "top-down type of bureaucratic control (as indexed by such scales of hierarchy of authority, formalisation, impersonality) and the second [bottom-up type] based on professional expertise which tends to be associated with the division of labour." (Tyler 1988 : 50)

Another element in the design of administrative structure is its scope, or the concept of 'span of supervision'. Also known as 'span of control' this determines and defines the number of employees in a given unit reporting to a single executive at a specific level. While no absolute number per supervisor can be set forth, the optimum number

is determined by such factors as time available for supervision, complexity of the situation, stability of operations, and competencies of the supervisor. Another consideration is that "there is likely to be a decline in satisfaction if bureaucratic supervision becomes too severe" (Tyler 1988 : 54), hinting that there is a relationship between bureaucratic control and output of production.

The size of the control span determines the 'shape' of the organizational structure with 'flat' structures being those where the span, or number of those reporting to a single executive, is large. One of the problems of flat organizations is that there may be an overburdening of the top level administrators if there is a large supervision span size. Where the span is relatively limited with many executive positions between the lowest and the highest, the organizational structure is referred to as 'tall'. Problematic in the tall organizations is the concept of 'layering' where communications get delayed or lost as they flow up one branch and down another to allow for the exchange of information at the lower, different branching, levels. Sometimes an informal network of communications is created as a 'trans-hierarchical bridge' to facilitate more rapid communication between administrators of similar levels on different branches.

The principle of line-and-staff organization derives from the precept of differentiation. Positions are created based on levels of decision-making authority, the degree or type of specialization of work performed, or the grouping of tasks. Line-and-staff positions represent the vertical and horizontal structure of the organization with the creation of line positions having an *a priori* relationship to staff positions. In other words, line positions must first be created on which staff positions depend. Line positions are created by departmentation resulting in the grouping of tasks, sections, or divisions.

Executive authority of the incumbent of a line position is delegated by the chief executive officer as he defines the duties and scope of authority of those holding these positions. The staff positions make

up the horizontal dimension of the organization with those in these positions acting as advisors, consultants, or assistants to their line counterpart. The line counterpart also defines and determines the duties and responsibilities of the supporting staff.

In order to avoid inter-organizational conflict between staff personnel serving a line officer at one level with line administrators at an equal or lower level, the unity of command principle has application. This yields the axiom that every person in the organization knows to whom and for what he is responsible.

Formal and Informal Groups in Organizations

The formal relationships of components within institutions are usually laid out in the form of an organization chart. In education, these charts usually focus on the operational dimensions of the school system. A typical organization chart, with a focus on the operational dimensions of a school, might include such major divisions as Operations; Innovation and Development; Internal Relations; Environmental Relations; Administrative Affairs; and Logistical Support Services.

Organizational charts have disadvantages that are quite obvious but bear explication. They tend towards rapid obsolescence. In a dynamic, ever-changing world, contingencies that may crop up cannot be accounted for, especially at the stage in planning where charts are drawn up. They don't take into account the 'people' aspects of personality and motion dynamics, or political alliance. They generally tend not to provide for how to affect change or how professional development is to be achieved. Neither can, or do, they predict the impact on operations that human factors bring to bear.

The informal grouping of personnel (the informal organization) grows out of interpersonal interactions. These, in turn, give rise to special loyalties, a set of norms and values influencing how the workers behave. This behavior takes place regardless of the demands of the overriding formal organization. The informal organization also creates

its very own communication network. This network cannot be accounted for in the formal organization chart. Neither, by its very nature, can it be understood by organization members at the higher levels.

Whether the informal organization is a positive or negative force, stimulation for the creation of such groupings derive from the complexity of the situation. The likelihood that such groups will be created also depends on such factors as similar backgrounds in professional preparation, the dynamics of age groups, correlation in professional schools attended, and compatible philosophies of the people within the organization.

Administration as Decision Making

The study of the decision-making process in relation to educational administration is a development that has only recently begun. The nature and substance of the decision-making process is conceptualized in different ways with a lack of consensus on the quantity and sequencing of elements in the process. However, the fundamentals laid down by John Dewey in the identification of the sequential process and activities called 'thinking' remain commonly recognized and have been modified in modern times to include decision-making.

The essential elements in the action-oriented decision-making process include; a situation in which a decision is called for, the definition and diagnosis of the problem, the collection of pertinent data, generating alternative courses of possible action by prioritizing solutions, analysis and appraisal of alternatives (each portraying the elements of the problem at hand), determination of the consequences of each alternative, and evaluation of the impact of the decision after the fact.

While Simon created an analysis of the decision-making process parallel to that of Dewey, he went further to prepare a taxonomy of decision-making based on what he called programmed and non-programmed decisions. Repetitive and routine activities not requiring

unique responses exemplify what he termed as *programmed decisions*. In contrast, new issues and problems previously unaccounted for arise that cannot be handled or resolved through the practice of operating principles that have been standardized. In this case, the creative, adaptive, problem-solving behaviors that characterize *non-programmed decisions* should be brought to bear. In spite of the different nature of the procedures and techniques, these processes both have their necessary place in the organization and can be improved to meet organizational needs. The improvement of the programmed decision process can be attained as a result of the development of better standard operating procedures, more precise and relevant policies, and the appropriate distribution of decision-making responsibilities. In order to achieve improvement in the process of non-programmed decision-making, programs for training in operations research, quantitative analysis, or the management of information can be developed.

Methods of Improvement

The above mentioned improvements facilitate the decision-making process. In addition, there are some special mechanisms and procedures that also aid in the process of decision-making. The main mechanism is *model construction* where the model, as a representation of reality, excludes all that is not relevant and reduces complexity to as few important factors as possible. Around each type of decision problem is built a new and separate model. The hard data necessary for rational decision-making is then produced by statistically analyzing the data generated by the mathematical relationships between the key variables. Another mechanism is the "decision tree" which is a picture or diagram of decision alternatives, resulting events, and the consequences of the decision path taken. Its dependence (like 'model theory') on statistical probabilities allows for a mathematical or quantitative approach. This helps to avoid the dangers created by reliance on subjective opinion and raw judgements by decision makers.

Game theory is another of these mechanisms and utilizes simulation techniques where actions are met with more or less immediate reactions. PERT (Program Evaluation and review technique) is another which deals with scheduling and allocation of resources. Finally, *cost-effectiveness* as a tool in decision-making has yet to receive its full measure of use however, it approaches problems from the standpoint that costs are measured against the level of effectiveness potentially achieved. The mathematical relationship thenceforth revealed allows for an objective analysis.

Organizations within schools, as with any other type of organization, are comprised of constellations of decision points. These interrelated decision points are also arranged in an hierarchy with the differentiation of the top level from the lower levels arising from such considerations as scope, strategic nature, and exceptionality of the choices to be made. Top level administrators should recognize that they are limited to these types of choices and should avoid interfering with, and possibly reducing, the effectiveness of decision-making members at other levels. As Barnard points out, one decision that they are at times compelled to make in this regard is no decision at all. This is especially true when those decisions should be made by others, or when the decisions made will not bear effectiveness, or when the timing of a decision may be premature.

The "fine art of administration" lies in the recognition of which decisions are better left to others in the organization. This may be the first step in the improvement of the practice of educational administration. There are many ways of augmentation available to the administrator. The clarification of responsibility for decisions is a major function of the administrator. In this, stipulation is made for who has what kind of responsibility or authority for decisions, types of decisions by each level in the organization, the limitations of decision-making, and the time frames to be followed. The administrator is involved in the provision of a support system such as the necessary

data base or the use of special data consultants to aid in decision-making. Improvement can also be made by providing for training of the work force in the art and science of decision-making. This training follows from the consideration that the best decision makers are made and not born. The administrator can help to create or utilize in-house or external seminars. This is done with an eye towards improving the latent competencies of those in leadership positions, especially during brainstorming sessions. Improvement can be effected also by engendering identification of political, social, psychological factors and such. It is important to foster sensitivity to the factors that affect and influence the situation under which decisions are made within and by the organization. Finally by reviewing, analyzing, and evaluating the results and consequences of previous organizational behavior patterns. If this is done on a frequent basis with the courage to accept responsibility for errors in judgment, improvement leading to decisions of a more effective nature are assured.

NOTES

- 1 With his construct of the holistic concept of schools as 'social unities' as laid out of *The Sociology of Teaching* (1930), Wiley, NY., Waller was perhaps the first to classify institutions such as schools as collective cultures.
- 2 This analysis of the steps involved in decision making is adapted by Morphet, et al. from Hoy, W.K., and Miskell, C. G. 1978. *Educational Administration, Theory, Practice, and Research*. Random House, NY. (pp. 217-226)
- 3 Citing Grant and Eiden, Knezevich states that "Educational attainment of the U.S. population is relatively high and keeps trending upward." (pg. 19) Rapid gains in the median number of years of schooling were attained yielding a median level of schooling at 12.5 years in 1980. The countries closest to this level were The U.K., Japan, and Canada, but still averaging one year less. The number

for the literacy rate is quoted from the same work.

- 4 Among the first social scientists in the fifties to express theoretical concepts concerning administration, Herbert A. Simon made extended use of mathematical formulas to determine group relations. An important work in this area is cited in the bibliography.

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